## **ABSTRACT**

Methods and apparatus are provided for moving an intraluminal filament, such as a shaft or hypotube. The actuator includes a housing having a channel therein, the channel having at least a first inclined surface. The actuator also includes a pivotable actuator assembly coupled to the housing and having first and second spaced-apart jaws extending into the channel. The first and second jaws define an opening of a first dimension therebetween. The actuator assembly pivots for urging at least one of the first and second jaws against at least the first inclined surface to transition the first dimension to a second dimension. The method comprises aligning the intraluminal filament between spaced-apart jaws of a pivotable actuator assembly, pivoting the actuator assembly to urge said jaws against at least one surface causing said jaws to grip the intraluminal filament, and further pivoting the actuator assembly to move the intraluminal filament.